Date: 11/6/2002

Division/Contact: DWS / Pat McDonnell

Topic:

Recommendations to DWD regarding the adoption of principles governing the exchange of data between proposed WorkSET and contract agency-based information systems.

Summary of Problem or Issue:

DWD, working in conjunction with DHFS and DEG, has been moving aggressively to construct and begin implementation of the WorkSET Plan, a scope of work which will, among other things, ultimately result in the creation of a new statewide automated system designed to support and track the activities undertaken by W-2 contract agencies.

To date, however, DWD has not specified in presentations or documents made available regarding the WorkSET planning and implementation process:

a. The extent to which general parameters have been identified to govern the domain of data captured in new WorkSET systems which will be made available to providers, the mechanisms by which such data will be transmitted, or the timeliness in which data will be provided; or

b. The extent to which new systems represented in WorkSET will be able to exchange data with locally-based applications, systems, or data stores.

The intent of this paper is to outline a series of principles which should be incorporated into the WorkSET planning and implementation process regarding the issue of data exchange between WorkSET-based systems and locally-based applications, systems, and/or data stores utilized by contract agencies to support the provision of W-2 and related services.

Background

a. The Problem with CARES

In an attempt to ensure the integrity of W-2 and related policy governing programs tracked in the Work Program subsystem, it appears that DWD has utilized CARES as a mechanism to mandate a certain uniformity in the actual provision of direct services through defined driver flows and requirements for screen population. In effect, DWD has chosen to use CARES as a mechanism to dictate a generic or minimum case management process or case management shell applicable to all providers Statewide. Compliance with this generic process is reinforced through a performance standard regime which in many instances measures the extent to which providers have made timely or correct entries in CARES which demonstrate compliance with this minimalist, CARES-reinforced case management process.

However, given that case management systems must vary by locale to a) reflect unique customer populations, b) characteristics in the external environment which may impact employment-related factors, and c) distinct elements of provider operations beyond DWD-sponsored programs, a gap exists between the functionality afforded by CARES which is predicated on reinforcing the

1

generic, minimalist case management process described above and the functionality needed by local providers to support the operation of unique, customized case management systems.

In order to fill this gap, providers (especially providers that serve large populations) have historically been faced with the prospect of constructing systems external to CARES to support elements of their case management system and feeding these applications in conjunction with CARES. Unfortunately, given that CARES is a closed system with limited mechanisms for timely data exchange, integration of data between CARES and locally constructed systems which support case management operations is exceptionally difficult. When providers have taken steps to develop strategies such as "screen scraping" to bridge local systems and CARES, such efforts have proven to be fundamentally unstable, inefficient, and expensive for both DWD and the provider in question. In addition, State-supported mechanisms of data exchange including the Data Warehouse, the extracts, EOS, and online query screens all fall short in terms of timeliness, degree of data element content, and/or malleability in supporting the operational needs of providers.

Historically, then, W-2 providers have found that operational imperatives have compelled them to develop systems, applications, and/or data stores in addition to CARES to:

❖ Capture information regarding elements related to service provision which CARES completely fails to address;

❖ Capture information regarding service provision which is more detailed and contextually rich than the summary record of that service or outcome which is required by CARES to demonstrate that such an event took place. This characteristic of CARES to request only summary information about a given event facilitates the ability of the State to meet Federal reporting requirements and perform program monitoring tasks, but it fails in many instances to provide program managers and FEPs with the level of detail needed to operate the program effectively and efficiently on a day to day basis.

❖ Support the customized workflows of a given W-2 agency in which the actual performance of core case management functions has been embedded in the functionality of the system. In contrast, defined driver flows representing a case management shell applicable to all providers statewide in a closed system like CARES stymies the ability of providers to create information systems which best support their agency's unique workflow. The result is that potential efficiencies and productivity gains which could be realized by more customized systems are restricted given the inability to link data captured in locally-based system with CARES, meaning that in order to use these systems, some level of double data entry is required, the net impact of which is to wipe out the efficiencies gained by deploying the local system in the first place.

Although it is envisioned that newly developed systems represented in WorkSET will have the potential to close the functionality gap currently left by CARES which has prompted local providers to develop their own systems, applications, and data stores, implementation of the WorkSET plan will not eliminate the need for locally-based systems, for no matter how large WorkSET grows, it cannot house the complete functionality needed by all providers to support their unique case management flow. Therefore, the justification for local system development outlined in the three bullets points above will continue to exist in perpetuity.

What is being sought in this document is that the State adopt principles to guide WorkSET system development which allow for a further integration of State-supported and locally-constructed systems via enhanced data exchange mechanisms to maximize the potential operational efficiencies gained by locally conceived and implemented technologies.

b. Reaching the Limits of the State-Defined, Minimalist Case Management Process Reinforced Through Automation – Disconcerting Signs from the *Barriers Screening Tool* Development Process

During the fall of 2002, DWD sponsored a series of Joint Application and Design (JAD) sessions for the purpose of planning the automation to support deployment of the recently constructed Barrier Screening Tool. Building on the minimalist approach which has characterized traditional CARES development, the automated version of the screening tool currently appears to be headed toward the construction of a stand-alone (at least in the short-term), web-based module which supports a minimum set of criteria for barrier screening delineated by DWD with input from W-2 agency representatives.

The problem, from strictly an automation standpoint, with this approach concerns those agencies a) which employ a wider breadth of screening and assessment instruments which relate contextually to the Barrier Screening Tool but which go beyond the content of this State-supported instrument and b) who use locally-devised systems to collect, track, summarize, and communicate these screening and assessment results to internal agency staff in accordance with the customized workflow of the provider in question. Providers which have such systems currently in place which have proven effective in supporting the barrier and assessment tasks associated with that agency's case management process are now faced with the question of how to keep a locally conceived process that works in place while also feeding a new monolithic State-supported system whose only connection is to CARES, another closed system.

Requests to address data exchange issues associated with deployment of the Barrier Screening Tool made during the JAD sessions were largely tabled, and a timeframe for deployment of the tool has been specified for March of 2003 even though issues associated with data exchange between the module and locally-devised systems have not been addressed or incorporated into the scope of work associated with the project.

What is being sought in this document is that DWD adopt principles to guide WorkSET system development which ensure that issues associated with data exchange between newly constructed WorkSET modules and local systems are addressed before a given WorkSET module is deployed. In this regard, data exchange-related issues should not be treated as an afterthought in WorkSET system development.

Recommendations to Secretary:

Given that many elements of the WorkSET Plan are still at a very conceptual level with only limited work actually completed on the actual construction of the envisioned WorkSET Systems, it seems premature to make definitive recommendations regarding the technologies which should be employed to enhance data exchange capacity between State and local systems. In this regard, it seems more appropriate at this juncture to outline a series of principles which DWD should formally incorporate into the WorkSET Plan to guide the actual construction of WorkSET systems. These principles include the following:

a. *The Principle of What Goes In Must Come Out Shortly Thereafter*

This principle can be stated as follows: data which is entered by W-2 agency staff or agents acting on behalf of a W-2 provider into a State-based system in accordance with W-2 contract requirements must be made available to the entering agency in an agreed upon format on as close to a real-time basis as possible given technological and fiscal restraints. Approaches which would result in the realization of this principle would include, but are not limited to, read-only access to WorkSET-based system tables with local data stores populated either

through near real-time replication and/or trigger mechanisms which populate local tables as transactions occur in WorkSET-based systems.

The transfer of WorkSET-based data to locally-based data stores on a near real-time basis affords individual providers a greater capacity to:

i. Use all agency-entered information to integrate, support, and monitor case management and related processes, *especially those processes which are unique to that provider.*

ii. Support processes/applications which relate to agency service elements which are supplemental to core case management functions or which are provided by the agency through other programs administered by the agency which are not under the auspices of W-2. This would allow for the creation of a complete picture of the W-2 and non-W-2 services being provided by the agency to the work program customer in question;

iii. Support reconciliation efforts in which detailed aspects of a given form of service provision tracked through systems independent of WorkSET are connected with a more generic WorkSET transaction to ensure all data which should be in the WorkSET system is there.

b. *The Principle of Reasonable Substitution*

This principle can be stated as follows: when a provider has demonstrated that they have a locally-constructed application which mimics the core functionality afforded by a WorkSET system and contains a degree of functionality beyond what is provided through the WorkSET application in order to support local case management processes, DWD should take reasonable and fiscally feasible steps to create mechanisms which allow the provider to upload data from the local data store to the State-based system in question in order to meet State-delineated reporting requirements.

It is important to note that adoption of this principle does not in any way preclude the State from defining the data elements it requires to be reported from providers and to control the quality and integrity of such data by establishing State reporting database structures and enforcing database access parameters.

The transfer of locally-based data to WorkSET systems would afford individual providers a greater capacity to:

i. Construct customized work flows which best reflect locally conceived and developed service philosophies and processes and support such elements of service delivery with a customized suite of locally developed applications;

ii. Support the further integration of case management and related processes through applications which allow for enhanced information sharing and aggregation;

iii. Control at the local level how and when data is captured during the work process, at what level of detail, and how it is integrated with other data elements.

   c. *The Principle of Data Exchange Concurrence Before Module Deployment*

This principle can be stated as follows: DWD agrees not to deploy a new WorkSET-based system to be utilized to track W-2-related activities until a) a series of JAD sessions are held with contract agency representation specifically geared toward the identification of data exchange issues presented by the deployment of the module in question, b) strategies are developed to address these issues, and c) the rollout of mechanisms designed to address identified data exchange issues can occur simultaneously with deployment of the module in question.

Finally, in addition to the adoption of the aforementioned principles, it is recommended that a *Joint WorkSET Technology Advisory Committee* be created with representation from DWD, W-2 contract agencies, and Deloitte Consulting and other relevant vendors involved in WorkSET planning. The purpose of this Committee would be to discuss the opportunities and limitations presented by the technologies in place both at the State and local level to support the type of data exchange elements described in this paper.

In forming such a committee, particular emphasis should be placed on assessing what impact technological elements such as WorkSET platforms have upon the approach which should be taken in building interfaces which allow for data exchange between State and local systems. For example, this group may come to the conclusion that the most cost effective and efficient mechanism to achieve the functionality being sought by local agencies is to set up Microsoft BizTalk servers at both the State and local levels and exchange data between these servers via XML.

In this regard, this group would explore the issue of data exchange between State and local systems from a purely technical perspective, identifying different options to obtain the functionality being sought by contract agencies and the feasibility of each from a cost and resource perspective.

Comments/Positions by External Partners: N/A

Comments by Technical Reviewers: None